the High allowed a strengthening of the southwest drift aloft and a corresponding acceleration in the northeastward movement of the storm. The hurricane was now near latitude 31° 30′ N. and longitude 73° with lowest pressure somewhat below 29 inches. The following morning the S. S. Collegian recorded the passage of the center of the storm in latitude 33° 20′ N and longitude 69° W. with lowest barometer reading, 28.62 inches. The S. S. Maraval near by recorded a pressure of 28.98 inches with a shift of wind from east-southeast through north to northwest and a wind force of 12. At 2 a. m. the following morning (October 1) the S. S. West Cobalt reported passing through the storm near latitude 41° 30′ N and longitude 59° W with lowest barometer 28.50 inches and wind force of 12. A little farther north the Saxoleine recorded a pressure of 28.59 inches at 10 a. m., the wind backing from south to east to north around to west-southwest. Turning northward to western Newfoundland, the hurricane lost intensity over colder water.

The next disturbance of this nature apparently originated in low latitudes off the Pacific coast of Guatemala and was central on the morning of the 13th of October southeast of the Mexican Pacific port of Salina Cruz on the Gulf of Tehuantepec. It moved rapidly northward across the Isthmus of Tehuantepec and the western Gulf of Mexico and was encountered by the steamships Corning and El Siglo during the evening of the 15th near latitude 27° 30′ N. and longitude 92° W. By the following morning it had crossed the Louisiana coast and was central near Vicksburg, Miss., with a pressure of 29.26 inches; and during the night of the 16th dissipated over

Arkansas and southern Missouri. The contour of the isobars was considerably distorted from the ideal by a strong pressure gradient from northeast to southwest over the United States, which tended to squeeze the isobars together on the northeast quarter of the storm and throw them wide apart to the southwest. The closing up of the isobars was especially effective in the vicinity of Pensacola, Fla., which was about 250 miles from the path of the center but recorded the highest wind velocity (64 miles from the southeast) of any land station. The storm in general lacked the intensity near the center that we normally expect of a true hurricane.

the center that we normally expect of a true hurricane.

Meanwhile, a disturbance became apparent just north of the Leeward Islands and began to move north-north-eastward; but with the strengthening of a large high-pressure area to the north and northeast, the storm was slowed up and deflected to the northwest. It passed just northeast of Bermuda on the 17th and crossed the Atlantic coast near Nantucket, Mass., on the night of October 18th and was still in evidence near Boston the following morning. This storm lacked the intensity necessary to be classed as a hurricane, but the shape and distribution of the isobars showed a close resemblance to this type.

The severe storm of the 22d-25th of October, which developed north of the Bahamas and moved northward to Hatteras and thence north-northwestward to extreme northwest Pennsylvania, was formed and maintained by the usual processes attending extra-tropical storms and bore no resemblance to a hurricane. (See Chart VIII.)

XIII.)

## NOTES, ABSTRACTS, AND REVIEWS.

## THE PAN-PACIFIC CONGRESS, AUSTRALIA, 1923.

[Reprinted from Nature, Jan. 5, 1924.]

Among the many problems discussed by the congress the two following are of special interest to meteorologists, geographers and oceanographers, and are reproduced in full.

\* \* \* Pacific radiatelegraphy—The congress em-

\* \* \* Pacific radiotelegraphy.—The congress emphasized the importance of the speedy erection of wireless stations in all countries bordering the Pacific capable of communicating directly with each other. It recommended that arrangements be made for all wireless stations in Pacific regions to keep daily records on an approved basis with regard to atmospherics, their effect on wireless communication, and their relation to meteorological conditions. It was suggested that Governments of the different countries concerned should establish a daily mean time signal.

Geography and oceanography.—On the motion of Dr. N. Yamasaki, of the Imperial Observatory, Tokyo, it was agreed to urge the increasing importance of accurate coastal surveys being carried out in accordance with the recommendations of the International Hydrographic Bureau, and that special attention should be given to the scientific and economic interest of the construction of detailed charts of the Great Barrier Reef of Australia. The congress also invited attention to the need for an adequate wireless meteorological service in the more remote parts of the Pacific Ocean, and urged that the international exchange of meteorological information for

the purpose of forecasting be extended to those regions.

## COLD WEATHER IN EUROPE.

It is quite evident that the weather this winter in Europe has been characterized by severe storms and intense cold. Whether the winter as a whole will be classed among the severe ones can not of course be determined from press reports that reach this country from time to time. In the nature of the case the press dispatch is generally made up from a limited amount of reliable meteorological information and while the accuracy of the information presented therein is not questioned, its general character leaves much to be gleaned from the official meteorological reports of the several European countries.

An Associated Press dispatch from London summarizes the situation as follows:

JANUARY 10, 1924.

Unusually severe storms, accompanied by intense cold and heavy snow, are sweeping Europe this winter. Off the coasts of Spain and France the disturbances have proved a serious menace to shipping, while in the North Sea and in Scandinavian waters the ice flees are so heavy that navigation in many places is difficult.

Not in many years have there been so many casualties from avalanches in the Swiss-French Alps. Heavy rains in the lower passes and foothills of the latter mountains have contributed largely to the Marne and Seine floods in France.

England also is suffering, although in a lesser degree. The cold in this country is severe and there is much snow, especially in the midlands and in the north.

Wind, snow, and rain over all of western Europe have seriously delayed telegraphic communication. Until 6 o'clock this morning no press dispatches had reached England from Spain in more than 24 hours.

-A. J. H.